

## **REMARKS/ARGUMENTS**

The Examiner and the Supervisory Examiner are thanked for granting the Applicant an in-person interview on November 16, 2004. During the Interview, several distinguishable features of the claimed invention were discussed. Nevertheless, agreement was reached that the Applicant will further clarify the subject matter regarded as the invention. Solely in order to expedite prosecution, the applicant has further amended the claims to recite additional patentable features.

More particularly, claims 1 and 19 have been amended to recite the features recited in claims 3, 7 and 12. In addition, claim 13 has been amended to additionally recite features in claims 3 and 7. It should also be noted that claims 1 and 13 have been further amended to additionally recite that a jobs manager generates first and second jobs data, first and second garbage collection instance data, and virtual machine instance data respectively associated with two or more jobs that concurrently run on the virtual machine, and the jobs manager further associates one or more methods to each of the jobs data, garbage collection instance data, and virtual machine instance data; and the class manager is arranged to create proxy data which enables a class associated with the virtual machine to be shared by the two or more jobs that are arranged to concurrently run on the virtual machine. (Specification, page 9, line 22 to page 11, line 19; please also see Figures 3 and 4 of the present application). Similarly, claim 19 has been amended to recite these additional patentable features.

It is respectfully requested that claims 3, 7, 12, 17 and 20-23 be cancelled without disclaimer or prejudice.

In the Office Action, the Examiner has rejected claims 1-2, 8-13, 17, 18, 22 and 23 under 35 U.S.C. §102 as being anticipated by U.S. Patent No. 6,081,665 (*Cejtin*). In addition, claims 3-7, 14-16 and 19-21 have been rejected under 35 U.S.C. §103(a) as being unpatentable over *Cejtin* in view of U.S. Patent No. 5,561,786 (*Morse*). These rejections are fully traversed below.

As was discussed during the interview, it is noted that *Cejtin* states that a plurality of threads in the same virtual machine simultaneously send messages to a plurality of selected address spaces (*Cejtin*, Col. 20, lines 37-40). However, It should also be

noted that a "thread is a simple record that holds a continuation." (*Cejtin*, Col. 7, lines-47-48). As noted in the specification, a job may have more than one associated thread (Specification, page 7, line 7, lines 34-35). Hence, *Cejtin* teaches multiple threads (or continuations), but not concurrently supporting multiple jobs in the same virtual machine process. Accordingly, it is respectfully submitted that *Cejtin* does NOT teach concurrently supporting two or more jobs by the same virtual machine.

Again, it is noted that in conventional virtual machines a job can be started on a virtual machine for each application (see, for example, specification page 1, lines 33, 34). However, in conventional systems, when more than one application is to be executed concurrently, more than one virtual machine must be started such that each application has its own instance of a virtual machine (Specification, page 1, lines 30-33). The claimed invention, however, recites a virtual machine that can concurrently support two or more jobs that can be associated with two or more applications (see, for example, claim 1). Thus, the claimed invention is patentable for at least this reason.

Nevertheless, solely in order to expedite prosecution independent claims 1, 13 and 19 have been amended to recite additional features which render them patentable for additional reasons. Some of these features are discussed below.

Claims 1 and 13 additionally recite that the virtual machine includes a jobs manager, a class manager, and a heap manager. Contrary to the Examiner's assertion (Office Action, page 7, paragraph 19), it is very respectfully submitted that *Morse* does NOT teach a virtual machine that includes a jobs manager, a class manager. Claim 19 also recites a similar feature. Accordingly, it is respectfully submitted that the claimed invention is patentable for this additional reason.

Furthermore, contrary to the Examiner's assertion (Office Action, page 4, paragraph 11), it is respectfully submitted that *Cejtin* does NOT teach sharing at least one class between first and second jobs that concurrently run on the virtual machine. independent claims 1, 13 and 19 recite this feature. Accordingly, it is respectfully submitted that the claimed invention is patentable for yet additional reason.

Still Further, it is respectfully submitted that *Cejtin* and *Morse* taken alone, or properly combined do NOT teach or suggest: a jobs manager that generates first and second jobs data, first and second garbage collection instance data, and virtual machine instance data respectively associated with two or more jobs that concurrently

run on the virtual machine, and the jobs manager further associates one or more methods to each of the jobs data, garbage collection instance data, and virtual machine instance data. Accordingly, it is respectfully submitted that the claimed invention is patentable for still another reason.


Finally, it is respectfully submitted that *Cejtin* and *Morse* taken alone, or properly combined do NOT teach or suggest: a class manager is arranged to create proxy data which enables a class associated with the virtual machine to be shared by the two or more jobs that are arranged to concurrently run on the virtual machine. Accordingly, it is respectfully submitted that the claimed invention is patentable over *Cejtin* and *Morse* for at least the reasons discussed above.

### **CONCLUSION**

Based on the foregoing, it is further submitted that claims are patentably distinct over the cited art of record. Additional limitations recited in the independent claims or the dependent claims are not further discussed because the limitations discussed above are sufficient to distinguish the claimed invention from the cited art. Accordingly, Applicant believes that all pending claims are allowable and respectfully requests a Notice of Allowance for this application from the Examiner.

Applicants hereby petition for an extension of time which may be required to maintain the pendency of this case, and any required fee for such extension or any further fee required in connection with the filing of this Amendment is to be charged to Deposit Account No. 500388 (Order No. SUN1P270). Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

Respectfully submitted,  
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